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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/781,596 | 02/12/2001 | Ian Robinson | 32093.00006 | 6793 |
| | 7590 09/26/2002 | • | | |
| Squire, Sanders & Dempsey L.L.P. Two Renaissance Square Suite 2700 | | | EXAMINER | |
| | | | CROCKFORD, KIRSTEN ANNE | |
| 40 North Central Avenue Phoenix, AZ 85004-4498 | | | ART UNIT | PAPER NUMBER |
| = === = :, | | | 1762 | 7 |
| | | DATE MAILED: 09/26/2002 | | |

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | Application No. | Mx - |
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| | | | Applicant(s) |
| Office Action Summary | | 09/781,596 | ROBINSON, IAN |
| | emeer concinculary | Examiner | Art Unit |
| | The MAILING DATE of this communication app | Kirsten Crockford | 1762 |
| Period fo | r Reply | rears on the cover sheet with the c | orrespondence address |
| THE I - Exter after - If the - If NO - Failur - Any r | ORTENED STATUTORY PERIOD FOR REPLY MAILING DATE OF THIS COMMUNICATION. Isions of time may be available under the provisions of 37 CFR 1.13 SIX (6) MONTHS from the mailing date of this communication. period for reply specified above is less than thirty (30) days, a reply period for reply is specified above, the maximum statutory period we to reply within the set or extended period for reply will, by statute, eply received by the Office later than three months after the mailing d patent term adjustment. See 37 CFR 1.704(b). | 36(a). In no event, however, may a reply be timed within the statutory minimum of thirty (30) days will apply and will expire SIX (6) MONTHS from Cause the application to become ABANDONE. | nely filed s will be considered timely. the mailing date of this communication. |
| 1)[🛛 | Responsive to communication(s) filed on 16 S | September 2002 . | |
| 2a) <u></u> □ | | is action is non-final. | |
| 3) <u>□</u> Dispositi | Since this application is in condition for allowa closed in accordance with the practice under <i>l</i> on of Claims | nce except for formal matters, pr Ex parte Quayle, 1935 C.D. 11, 4 | osecution as to the merits is 53 O.G. 213. |
| • | Claim(s) 1-22 is/are pending in the application. | | |
| | 4a) Of the above claim(s) <u>9,10 and 18-22</u> is/are | | |
| | Claim(s) is/are allowed. | | |
| · <u> </u> | Claim(s) <u>1-8 and 11-17</u> is/are rejected. | · | |
| 7) | Claim(s) is/are objected to. | | |
| | Claim(s) are subject to restriction and/or on Papers | election requirement. | |
| | he specification is objected to by the Examiner. | | |
| 10)□ T | he drawing(s) filed on is/are: a) accept | ted or b)⊡ objected to by the Exan | niner. |
| | Applicant may not request that any objection to the | | |
| 11)∐ T | he proposed drawing correction filed on | is: a) ☐ approved b) ☐ disapprov | ved by the Examiner. |
| | If approved, corrected drawings are required in repl | y to this Office action. | |
| 12)[] T | he oath or declaration is objected to by the Exa | miner. | |
| riority u | nder 35 U.S.C. §§ 119 and 120 | | |
| 13)🛛 🗸 | Acknowledgment is made of a claim for foreign | priority under 35 U.S.C. § 119(a) | -(d) or (f). |
| a)[|] All b) ☐ Some * c) ⊠ None of: | | |
| | I.⊠ Certified copies of the priority documents | have been received. | |
| 2 | 2. Certified copies of the priority documents | have been received in Applicatio | n No |
| | B. Copies of the certified copies of the priorit application from the International Bure te the attached detailed Office action for a list o | eau (PCT Rule 17.2(a)). | · · |
| 14) 🗌 Ac | knowledgment is made of a claim for domestic | priority under 35 U.S.C. § 119(e) | (to a provisional application). |
| - | ☐ The translation of the foreign language proveknowledgment is made of a claim for domestic | • • | |
| ttachment(| s) | | |
|) Notice) Informa | of References Cited (PTO-892) of Draftsperson's Patent Drawing Review (PTO-948) ation Disclosure Statement(s) (PTO-1449) Paper No(s) 4. | | PTO-413) Paper No(s) Itent Application (PTO-152) |
| Patent and Trac O-326 (Rev. | | on Summary | Part of Paper No. 7 |

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DETAILED ACTION

Election/Restriction

1. Applicant's election with traverse of claims 1-8 and 11-17 in Paper No. 6 is acknowledged. The traversal is on the ground(s) that, since claim 9 is dependent upon claim 1, if claim 1 is allowable then claim 9 would also be allowable. Applicant also argues that the product of group II is made by the same process as that claimed in group I, thus a search for group I would find, presumably, the related art for group I, which should not be a serious burden. This is not found persuasive because the considerations used for examining method claims are different than those used for examining product claims. Product claims are examined based on the properties of the final article produced, not on the method used to create the article; applicable art includes art directed to Applicant's final coated substrate produced by any method that would reasonably give the same product. Applicable art for a method of coating do not necessarily encompass all the fields of search required for product claims and therefore there is an additional burden in examining two classes of invention.

The requirement is still deemed proper and is therefore made FINAL.

Claim Objections

2. Claim 1 is objected to because of the following informalities: The Examiner suggests replacing "polyamines" in line 6 of claim 1 with --polyamine(s)-- since claim 1 does not necessarily require more than one polyamine. Appropriate correction is required.

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Claim Rejections - 35 USC § 112

- 3. The following is a quotation of the second paragraph of 35 U.S.C. 112:
 The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 4. Claims 1-8 and 11-17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

A broad range or limitation together with a narrow range or limitation that falls within the broad range or limitation (in the same claim) is considered indefinite, since the resulting claim does not clearly set forth the metes and bounds of the patent protection desired. Note the explanation given by the Board of Patent Appeals and Interferences in *Ex parte Wu*, 10 USPQ2d 2031, 2033 (Bd. Pat. App. & Inter. 1989), as to where broad language is followed by "such as" and then narrow language. The Board stated that this can render a claim indefinite by raising a question or doubt as to whether the feature introduced by such language is (a) merely exemplary of the remainder of the claim, and therefore not required, or (b) a required feature of the claims. Note also, for example, the decisions of *Ex parte Steigewald*, 131 USPQ 74 (Bd. App. 1961); *Ex parte Hall*, 83 USPQ 38 (Bd. App. 1948); and *Ex parte Hasche*, 86 USPQ 481 (Bd. App. 1949). In the present instance, claim 1 recites the broad recitation "a surface" in line 1, and the claim also recites "for example on the internal surface of a drinking water pipeline" which is the narrower statement of the range/limitation. For the purpose of examination, the claims have been interpreted as broadly requiring "forming a coating on a surface."

In claims 6 and 15, line 1, the phrase "rapid setting" is vague and indefinite because "rapid" is a relative term of degree and does not appear to be defined in the specification.

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Claims 11-17 are vague and indefinite because they are method claims, as set forth in the preamble of the claim, however the claims are dependent upon independent claim 10 which is directed to a water pipeline -- a product. It is not proper U.S. practice to have a method claim further limit a product claim. Claims 11-17 should be placed into independent form, or made dependent upon an independent method claim. Appropriate correction is required. For the purpose of examination, claims 11-17 have been interpreted as requiring the method steps set forth in claim 10 (which are also the same method steps set forth in independent claim 1).

Double Patenting

5. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

6. Claims 1-4, 6-8, 11-13, and 15-17 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1 and 5-8 of U.S. Patent No. 6,074,702. Although the conflicting claims are not identical, they are not patentably distinct from each other because the instant claims are broader than and thus inclusive of the method claims of U.S. Patent No. 6,074,702.

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Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 8. Claims 1-4, 6-8, 11-13, and 15-17 are rejected under 35 U.S.C. 102(b) as being anticipated by EP 0 936 235 A1.

With respect to claims 1, 4, 6, 13, and 15, EP '235 discloses a method of coating the internal surface of drinking water pipelines with a coating comprising the steps of: providing a first part comprising an aliphatic polyisocyanate; providing a second part comprising an aromatic polyamine; mixing together the first and second parts to form a mixture; and applying the mixture as a rapid-setting coating to the surface, where the aromatic polyamine reacts with the aliphatic polyisocyanate (see Abstract and claim 9).

As to claims 7-8 and 16-17, EP '235 teaches using the claimed spray equipment at paragraph 0046 on page 7. As to claims 2 and 11, it is noted that the specification discloses that liquid epoxide resin is an "amine reactive resin" at page 2, lines 14-19. EP '235 teaches blending liquid epoxide resin with the first part comprising an aliphatic polyisocyanate (see the table on page 7 and claim 9). With respect to claims 3 and 12, it is the Examiner's position that, after application of the mixture to the surface, the polyamine of EP '235 inherently reacts simultaneously with the polyisocyanate and the reactive resin since the composition of EP '235 is materially similar to Applicant's claimed composition.

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9. Claims 1, 4-8, and 13-17 are rejected under 35 U.S.C. 102(b) as being anticipated by EP 0 431 728 A1.

With respect to claims 1, 4-6, and 14-16, EP '728 discloses a method of forming a coating on a surface comprising the steps of: providing a first part comprising an aliphatic polyisocyanate (see page 3, lines 30-41); providing a second part comprising an aromatic polyamine chain extender (page 5, lines 19-25) in combination with an amine terminated polyoxyalkylene polyol (an oligomeric polyamine) (page 5, lines 14-18); mixing together the first part and the second part to form a mixture; and applying the mixture as said coating to said surface where the polyamines react with the polyisocyanate to form a rapid setting coating (page 6, lines 47-53).

As discussed above in the 35 USC 112, 2nd paragraph rejection, claim 1 has been broadly interpreted as requiring a "method of forming a coating on a surface," and is not interpreted as requiring coating on the internal surface of a drinking water pipeline. Additionally, it is noted that the preamble is not a limitation on the claims if it merely states the purpose or intended use, and the remainder of the claim completely defines the invention independent of the preamble. Stewart-Warner Corp. v. City of Pontiac, Mich. 219 USPQ 1162; Marston v. J.C. Penny Co., Inc. 148 USPQ 25; and Kropa v. Robie and Mahlman, 88 USPQ 478.

As to claims 7-8 and 16-17, EP '728 teaches using a heated, airless, self-mixing spray gun assembly (page 6, lines 47-53).

Claim Rejections - 35 USC § 103

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10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 11. Claims 5 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over EP 0 936 235 A1.

EP '235 lacks a specific teaching that one or more oligomeric polyamines are used in the second part in combination with the aromatic polyamine. It is noted that EP '235 teaches testing its compositions with poly(oxypropylene) diamine and poly(oxypropylene) triamine (oligomeric polyamines), along with aromatic polyamine, in the tests summarized in Table IV on page 4.

Table IV illustrates that the two oligomeric polyamines appeared to yield similar results in terms of gel time, thin film cure, and film integrity as the aromatic polyamine of the invention. It is the Examiner's position that it would have been obvious to have used one of the oligomeric polyamine taught in Table IV of EP '235 in place of or in combination with the aromatic polyamine of the invention with the expectation of successful results because the oligomeric polyamines appear to yield similar results as the aromatic polyamine and therefore one would expect results successful results similar to those of aromatic polyamine when using an oligomer polyamine in place of or in combination with EP '235's aromatic polyamine.

Conclusion

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Yoshimatsu (US 5,106,943) is cited as being directed to the formation of shaped

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articles, not a coating, however it discloses a two-part composition whereby the first part comprises an aliphatic polyisocyanate (col. 2, lines 55-68) and an epoxide resin (col. 2-3) and a second part comprising an aromatic polyamine as a curing agent (col. 5); the two parts are mixed together to form a mixture (col. 7, lines 62-67).

13. The papers filed on September 16, 2002 (certificate of mailing dated September 9, 2002) have not been made part of the permanent records of the United States Patent and Trademark Office (Office) for this application (37 CFR 1.52(a)) because of damage from the United States Postal Service irradiation process. The above-identified papers, however, were not so damaged as to preclude the USPTO from making a legible copy of such papers. Therefore, the Office has made a copy of these papers, substituted them for the originals in the file, and stamped that copy:

COPY OF PAPERS ORIGINALLY FILED

If applicant wants to review the accuracy of the Office's copy of such papers, applicant may either inspect the application (37 CFR 1.14(d)) or may request a copy of the Office's records of such papers (i.e., a copy of the copy made by the Office) from the Office of Public Records for the fee specified in 37 CFR 1.19(b)(4). Please do **not** call the Technology Center's Customer Service Center to inquiry about the completeness or accuracy of Office's copy of the above-identified papers, as the Technology Center's Customer Service Center will **not** be able to provide this service.

If applicant does not consider the Office's copy of such papers to be accurate, applicant must provide a copy of the above-identified papers (except for any U.S. or foreign patent documents submitted with the above-identified papers) with a statement that such copy is a complete and accurate copy of the originally submitted documents. If applicant provides such a copy of the above-identified papers and statement within **THREE MONTHS** of the mail date of this Office action, the Office will add the original mailroom date and use the copy provided by applicant as the permanent Office record of the above-identified papers in place of the copy made by the Office. Otherwise, the Office's copy will be used as the permanent Office record of the above-identified papers (*i.e.*, the Office will use the copy of the above-identified papers made by the Office for examination and all other purposes). This three-month period is not extendable.

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14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kirsten Crockford whose telephone number is 703-306-5461.

The examiner can normally be reached on Monday to Thursday and every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Shrive Beck can be reached on 703-308-2333. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1193.

kac

September 23, 2002

SHRIVE P. BECK SUPERVISORY PATENT EXAMINER

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